Rhinos, football and investment management

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NO football team can expect to win anything if it has a weak defence that leaks goals. Rhino conservation is no different. Protection of rhino populations is and will remain a key component of any successful rhino conservation strategy.

To be successful, rhino poaching has to be kept at low levels through effective protection, intelligence, investigations, prosecutions and community conservation work. Park managers are rightly concerned whenever they lose a single rhino to poaching. However, problems can occur if management focuses on protection to the exclusion of other complementary approaches – while one can see, touch and smell a poached rhino carcass, one can't see a rhino that wasn't born due to sub-optimal biological management. The latter problem is more abstract, and this is possibly why it has not received the attention it deserves until recently.

The Dunfermline defence

In football, even the best defence can concede a goal to a piece of brilliance, such as a Nakamura curled free-kick from the edge of the box into the top corner of the net (to sink Manchester United in the Champion's League, maybe?). However, as long as one has a potent attack capable of regularly scoring two or three goals a game, one is 1) more likely to win matches and 2) losing the odd goal (which all teams do from time to time) will not be so serious.

Over the last couple of years, losses of black rhino in Zimbabwe to poaching and snaring injuries has increased significantly. Fortunately these losses have almost been cancelled out by rapid breeding in a number of Zimbabwean Lowveld populations, which are amongst the best performing in Africa. The lesson here is that rapid growth provides more of a buffer against poaching.

As a Dunfermline Athletic fan (who appropriately play in African rhino colours – black and white) I know all too well that the corollary holds. At the time of writing, Dunfermline remains bottom of the Scottish Premier League, having failed to score a single goal in its last nine league matches. The team has defended reasonably well during this period (three 0-0 draws and three 0-1 defeats), but this alone doesn't produce enough points – to do that the team has to start scoring goals... In the same way, successful rhino conservation requires having both a potent attack (good biological management for population growth) and a good defence.

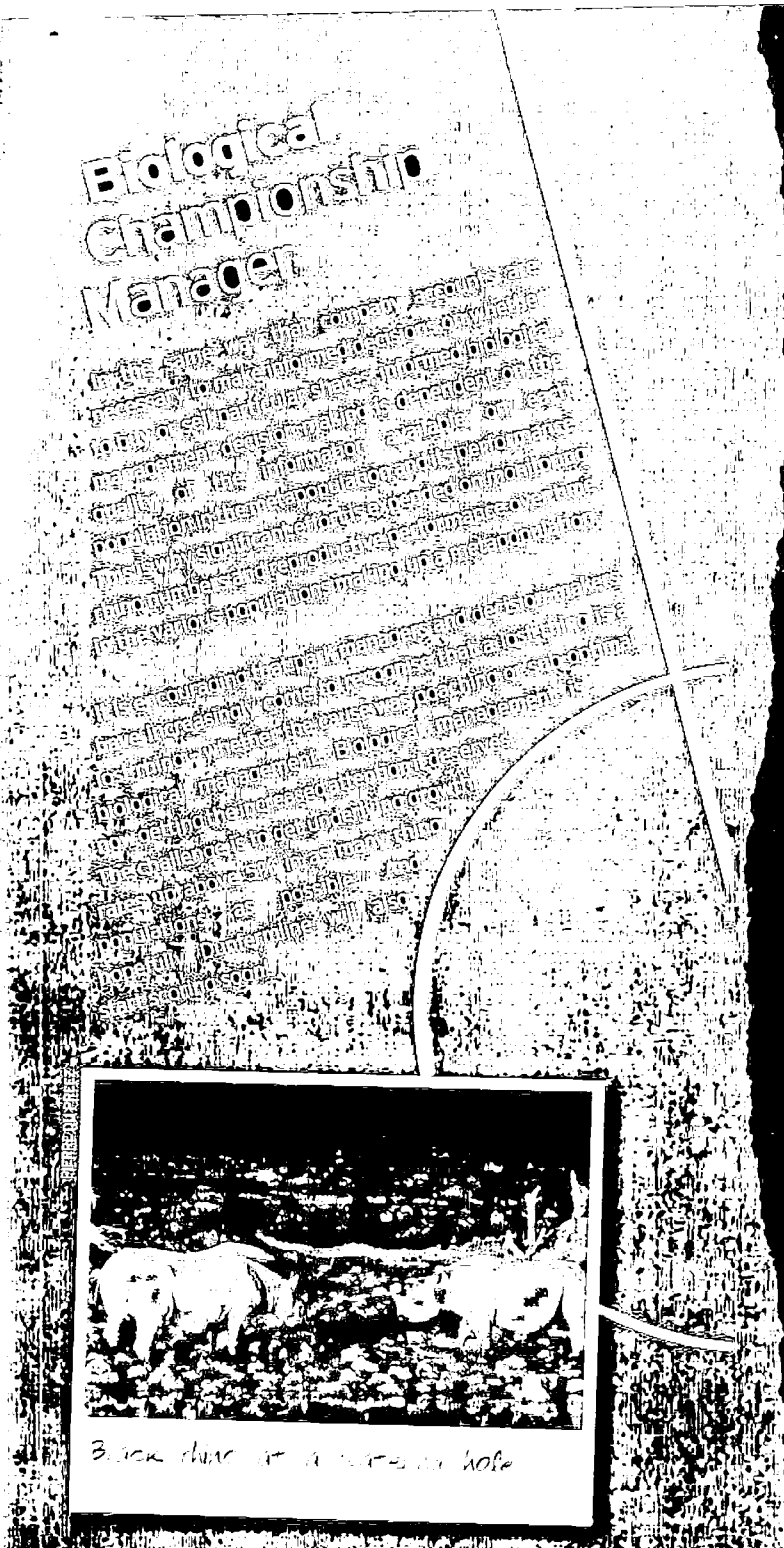
Rhino banking

The different populations of rhinos in a country can together be thought of as a national herd (a 'metapopulation') with interchange of animals between populations. The management of these various rhino investments (populations) is in many ways similar to managing a share or other investment portfolio. Thanks to the effects of compounding of growth rates, small differences in growth rates / yields matter – a lot! – whether one is managing an investment portfolio, paying off a mortgage, or seeking to increase rhino numbers. Small increases in rhino "investment returns" can translate, in just a few years, to hundreds more rhinos.

The other side of the coin is that sub-optimal breeding performance can be have a very significant negative impact on rhino numbers in only a few years. South Africa's *D.b.minor* (southern-central black rhino) metapopulation performance illustrates this well. Numbers grew rapidly by an average of 6.5% annually from 1989-1996. Following a period of conservative removals, rhino densities increased in some long-established populations and overall growth rates declined to only 2% over the next five years (1996-2001). The active promotion of improved biological management by the AfRSG since 2001 has coincided with South Africa's *D.b.minor* metapopulation performance improving a little up to 3.9% (2001-2005), although this was still below minimum target levels of at least 5% per year. The end result of this reduced performance over just nine years is that by the end of 2005 there were an estimated 456 fewer *D.b.minor* in South Africa than there would have been, had 6.5% growth been maintained since 1996!

Examples such as this have helped bring home to managers and decision-makers that sub-optimal biological management can be more devastating to rhino numbers than limited poaching. Managing for rapid population growth also minimises loss of genetic diversity, increasing long-term viability as well as providing surplus rhinos for new populations.

Biological management of black rhino primarily seeks to prevent overstocking of black rhinos (and also perhaps other competing browsers). In well-established populations, as overstocking could reduce the abundance of quality food for rhino cows, increasing inter-calving intervals, age at first calving (i.e. negatively affecting birth rates) as well as reducing calf survival and hence performance. By removing some rhino, and possibly also some competing browsers, browsing pressure is reduced with a view to improving nutrition for remaining rhino cows, and hopefully allowing them to churn out calves at a more rapid rate. The removed rhinos can also be invested in other (often new) populations with good growth potential.



End of the road for **Suzuki Rhino Club**

It's said that all good things come to an end, and sadly the UK Suzuki Rhino Club is next in line. Thus ends an era of pro-active support for Save the Rhino.

Petra Fleischer
Fundraising Manager

Our relationship began in July 2002, when Graham Scott, the intrepid boss of Mountain Media, who designed the Club's magazine, took part in a 79-mile cycle challenge from Greenwich Park in South London to Port Lympne Wild Animal Park, home to over 20 black rhinos – not all of them pleased to see a cohort of sweaty cyclists descend on them. Despite, or perhaps because of, the saddle sores, Graham announced that he wanted to do more to help Save the Rhino, and a great relationship was established.

Like all good relationships, this has succeeded, I think, because it has been two-way. We have provided news and photos from the Chyulu Hills rhino project in Kenya for the Suzuki Rhino Club magazine. The Chyulus is not a particularly easy project to raise money for: it's primarily about equipping rangers so that they can camp out for nights on end while looking for the elusive 12-14 rhino thought to survive in the dense thickets of the hills. It's been great to be able to raise the profile of the project in this way.

In return, the Club has donated a percentage of the proceeds from sales of the Suzuki branded merchandise, an amazing £3,750. A thousand pounds goes a long way in the field – that's about 65 pairs of boots for rangers, for example – and we are really grateful for this support. And all Suzuki's leftover merchandise has now been donated to us to send out to projects in the field – caps, fleecy hats, thermal mugs and T-shirts – good morale-building gear for the rangers.

It's a great pity that the Suzuki Rhino Club has come to an end. We will miss the exposure and the financial support. But perhaps individual members will want to remain involved with Save the Rhino – we hope they do.

Grants

In December 2006, Save the Rhino donated $10,000 to the AfRSG. The EAZA Rhino Campaign is about to award €23,400 to the AfRSG, which was one of the waiting-list projects. The African Rhino Specialist Group (AfRSG) has the reputation of being one of the most well-organised, productive and applied of International Union for Conservation of Nature (IUCN)'s Species Specialist Groups. The AfRSG's mission is to promote the development of viable populations of the various subspecies of African rhinos in the wild.